

WHAT IS CLAIMED IS:

1. A computer system for servicing software,  
comprising:

a target system having binary files built from a source  
5 version of software code;

an installer capable of executing on the target system  
for selecting one of at least two different update versions  
packaged within an update package for installation on the  
target system, the installer having a migrator for  
10 automatically reinstalling a fix after installation of one of  
the update versions.

2. The system of claim 1 further comprising an  
uninstaller capable of executing on the target system for  
15 uninstalling a version of the update package installed on the  
target system.

3. The system of claim 1 further comprising an  
extractor capable of executing on the target machine for  
20 extracting an updated binary file from the update package.

4. The system of claim 2 wherein the uninstaller  
comprises a reverse migrator for uninstalling a migrated fix

prior to uninstallation of one of the versions of the update package.

5        5.    The system of claim 1 wherein one of the two different versions comprises a release version.

6.    The system of claim 1 wherein one of the two different versions comprises a branch version.

10       7.    A method for servicing software in a computer system, comprising the steps of:

identifying an update package having one of at least two different versions of an updated binary file for installation on a target machine having a version of executable files;

15       selecting one of the at least two different versions of an updated binary file for installation on the target machine; and

persisting another version of the updated binary file from the update package for automatic reinstallation on the target machine after future installation of a higher version of executable files on the target machine.

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8. The method of claim 7 wherein selecting one of the at least two different versions comprises selecting one of at least two different release versions.

5 9. The method of claim 7 wherein selecting one of the at least two different versions comprises selecting one of at least two different branch versions.

10 10. The method of claim 7 further comprising the step of installing one of the at least two different versions of an updated binary file.

15 11. The method of claim 10 further comprising the step of migrating a fix after installation of one of the at least two different versions of an updated binary file.

20 12. The method of claim 11 further comprising the step of reverse migrating the fix prior to uninstalling the one of the at least two different versions of an updated binary file.

13. The method of claim 10 further comprising the step of uninstalling the one of the at least two different versions of an updated binary file.

14. The method of claim 7 wherein the selecting one of the at least two different versions of an updated binary file comprises migrating a fix on the target system.

5        15. The method of claim 7 wherein the selecting one of the at least two different versions of an updated binary file comprises stepping up to a higher branch version than the initial branch version selected for installation.

10       16. The method of claim 7 wherein the selecting one of the at least two different versions of an updated binary file comprises comparing the release version of the updated binary file with a release version of the file on the target system.

15       17. The method of claim 7 wherein the selecting one of the at least two different versions of an updated binary file comprises comparing the branch version of the updated binary file with a branch version of the file on the target system.

20       18. A computer-readable medium having stored thereon a data structure, comprising:

two or more sets of updated files, each set of updated files built from a different version of software code; and

a set of installation files packaged with the sets of updated files, the set of installation files having executable code for migrating an updated file.

5           19. The data structure of claim 18 wherein the version comprises a release version.

20. The data structure of claim 18 wherein the version comprises a branch version.

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21. The data structure of claim 18 wherein each set of updated files comprises a directory.

22. The data structure of claim 21 wherein the set of  
15 installation files is part of the directory.

23. The data structure of claim 18 wherein the set of installation files comprises an installer executable.

20           24. The data structure of claim 18 wherein the set of installation files comprises an uninstaller executable.

25. The data structure of claim 18 wherein the set of installation files comprises a migratory executable.

26. The data structure of claim 18 wherein the set of installation files comprises a manifest of the binary files in a set of updated files.

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27. The data structure of claim 26 wherein the manifest comprises hashes that uniquely identify each binary file.

28. The data structure of claim 18 wherein the set of  
10 installation files comprises a catalog file comprising  
information to authenticate each of the binary files.

29. The data structure of claim 28 wherein the catalog  
comprises branch information of each of the binary files.

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30. The data structure of claim 18 wherein the set of  
installation files comprises an installation information file  
comprising a list of a set of updated files.

20 31. The data structure of claim 30 wherein the  
installation information file comprises release version  
information.

32. The data structure of claim 30 wherein the installation information file comprises branch version information.

5        33. The data structure of claim 18 wherein the set of installation files comprises a branch information file comprising a list of installation information files for each branch version in each set of updated files.

10       34. The data structure of claim 18 wherein the set of installation files comprises a branch attribute file comprising branch attribute information.

15       35. A computer-readable medium having stored thereon a data structure, comprising:  
         a first set of data comprising file version information for an update package; and  
         a second set of data comprising branch attribute information, the branch attribute information having an entry  
20       for each branch version in the update package.

36. The data structure of claim 35 wherein the entry for each branch version comprises a branch name.

37. The data structure of claim 36 wherein the entry for each branch version further comprises a parent branch name of the branch name.

5        38. The data structure of claim 37 wherein the entry for each branch version further comprises a description of the branch version.

39. A computer-readable medium having computer-  
10 executable components, comprising:  
an installer capable of executing on a target system for selecting one of at least two different versions of an updated binary file for installation on the target system; and  
a migrator capable of executing on the target system for  
15 automatically reinstalling a fix after installation of one of the versions of an updated binary file.

40. The computer-executable components of claim 39 further comprising an uninstaller capable of executing on the  
20 target system for uninstalling a version of an updated binary file installed on the target system.

41. The computer-executable components of claim 40 wherein the uninstaller comprises a reverse migration



component for uninstalling a migrated fix prior to  
uninstallation of one of the versions of an updated binary  
file.

5           42. The computer-executable components of claim 39  
further comprising an extractor capable of executing on the  
target machine for extracting an updated binary file from an  
update package.

10           43. A computer system for servicing software,  
comprising:

means for receiving an update package having one of at  
least two different versions of an updated binary file for  
installation on a target machine having a version of

15 executable files;

means for selecting one of the at least two different  
versions of an updated binary file for installation on the  
target machine; and

means for persisting another version of the updated  
20 binary file from the update package for automatic  
reinstallation on the target machine after future installation  
of a higher version of executable files on the target machine.

44. A computer system for servicing software,  
comprising:

means for installing one of at least two different  
versions of an updated binary file selected for installation  
5 on a target system; and

means for migrating a fix selected from another version  
of the at least two different versions after installation of  
one of the at least two different versions.

10 45. A computer system for servicing software,  
comprising:

means for installing one of at least two different branch  
versions of an updated binary file selected for installation  
on a target system; and

15 means for stepping up to install a higher branch version  
than the initial branch version selected for installation.

46. A computer-readable medium having computer-  
executable instructions, comprising the steps of:

20 identifying an update package having one of at least two  
different versions of an updated binary file for installation  
on a target machine having a version of executable files;

selecting one of at least two different versions of an updated binary file for installation on the target machine; and

5 persisting another version of the updated binary file from the update package for automatic reinstallation on the target machine after future installation of a higher version of executable files on the target machine.

47. The method of claim 46 wherein selecting one of the  
10 at least two different versions comprises selecting one of at least two different release versions.

48. The method of claim 46 wherein selecting one of the  
at least two different versions comprises selecting one of at  
15 least two different branch versions.

49. The method of claim 46 further comprising the step  
of installing one of the at least two different versions of at  
least one updated binary file.

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50. The method of claim 49 further comprising the step  
of migrating a fix after installation of one of the at least  
two different versions of at least one updated binary file.

51. The method of claim 50 further comprising the step of reverse migrating the fix prior to uninstalling the one of the at least two different versions of at least one updated binary file.

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52. The method of claim 49 further comprising the step of uninstalling the one of the at least two different versions of at least one updated binary file.

10 53. The method of claim 46 wherein the selecting one of the at least two different versions of an updated binary file comprises migrating a fix on the target system.

15 54. The method of claim 46 wherein the selecting one of the at least two different versions of an updated binary file comprises stepping up to a higher branch version than the initial branch version selected for installation.

20 55. The method of claim 46 wherein the selecting one of the at least two different versions of an updated binary file comprises comparing the release version of the updated binary file with a release version of the file on the target system.

56. The method of claim 46 wherein the selecting one of the at least two different versions of an updated binary file comprises comparing the branch version of the updated binary file with a branch version of the file on the target system.

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